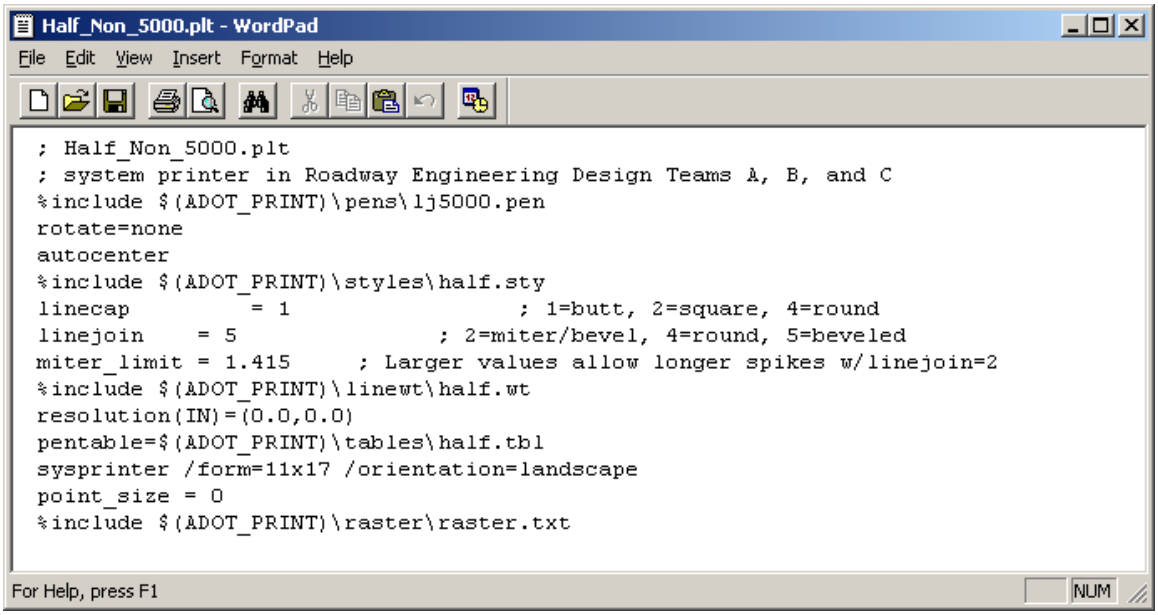
ADOT Printing

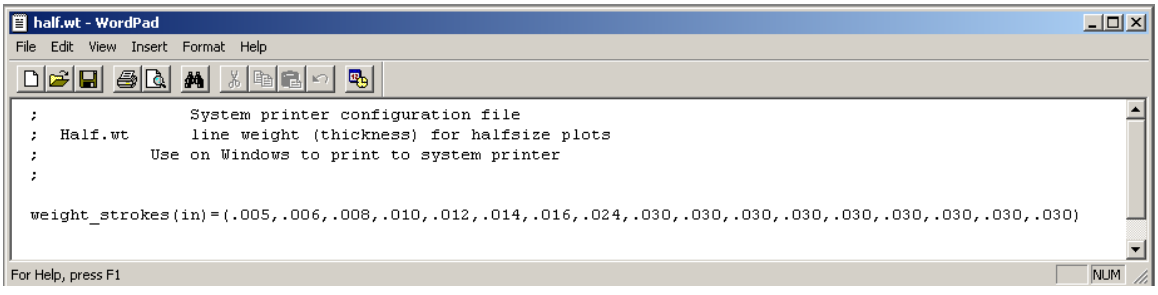
The ADOT CADD resources include printer driver files and pentables necessary to print ADOT project plans. This document deals with the "Roadway" configuration but the concept applies to all services with only minor differences.

The "Roadway\Dev\Printer" folder contains the driver files (.plt) and five folders that contain files that are called or "included" by the driver files to set standard print definitions. A typical driver file is as follows:

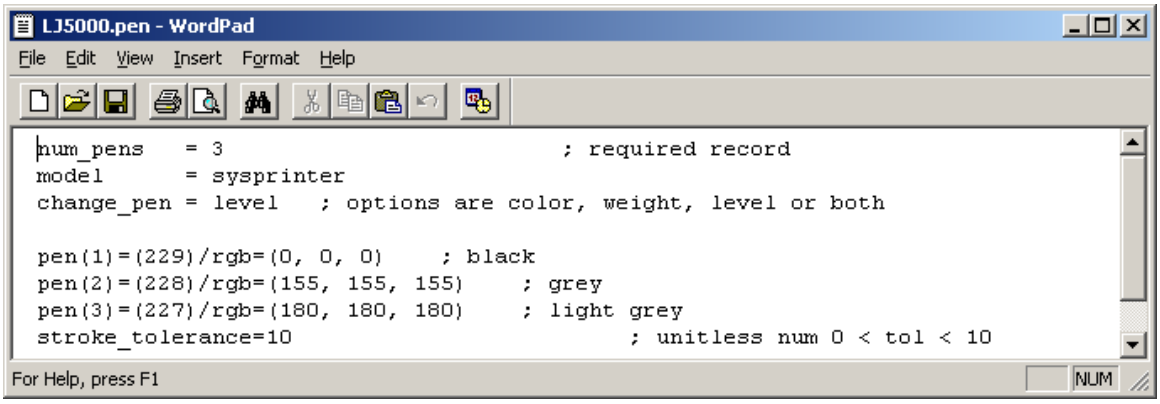


The folders contain specifications as follows:

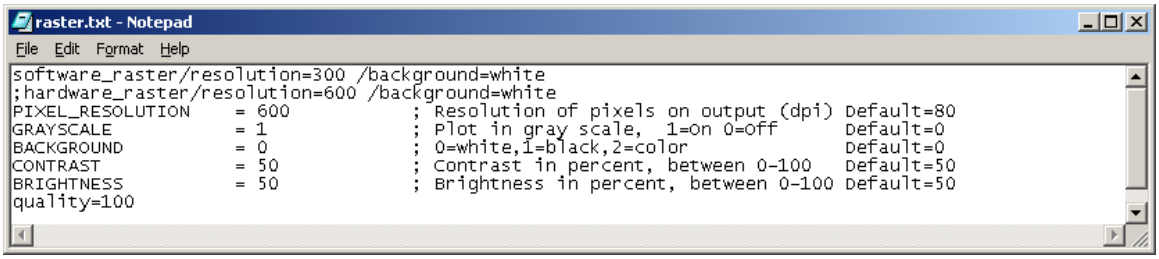
LineWt: line thickness



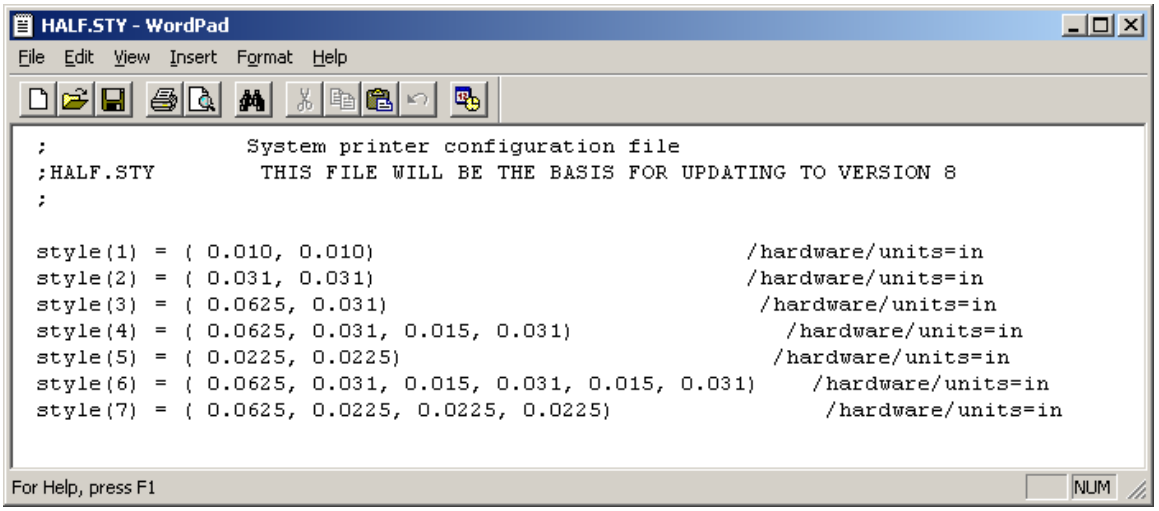
pens: number of pens and their corresponding color



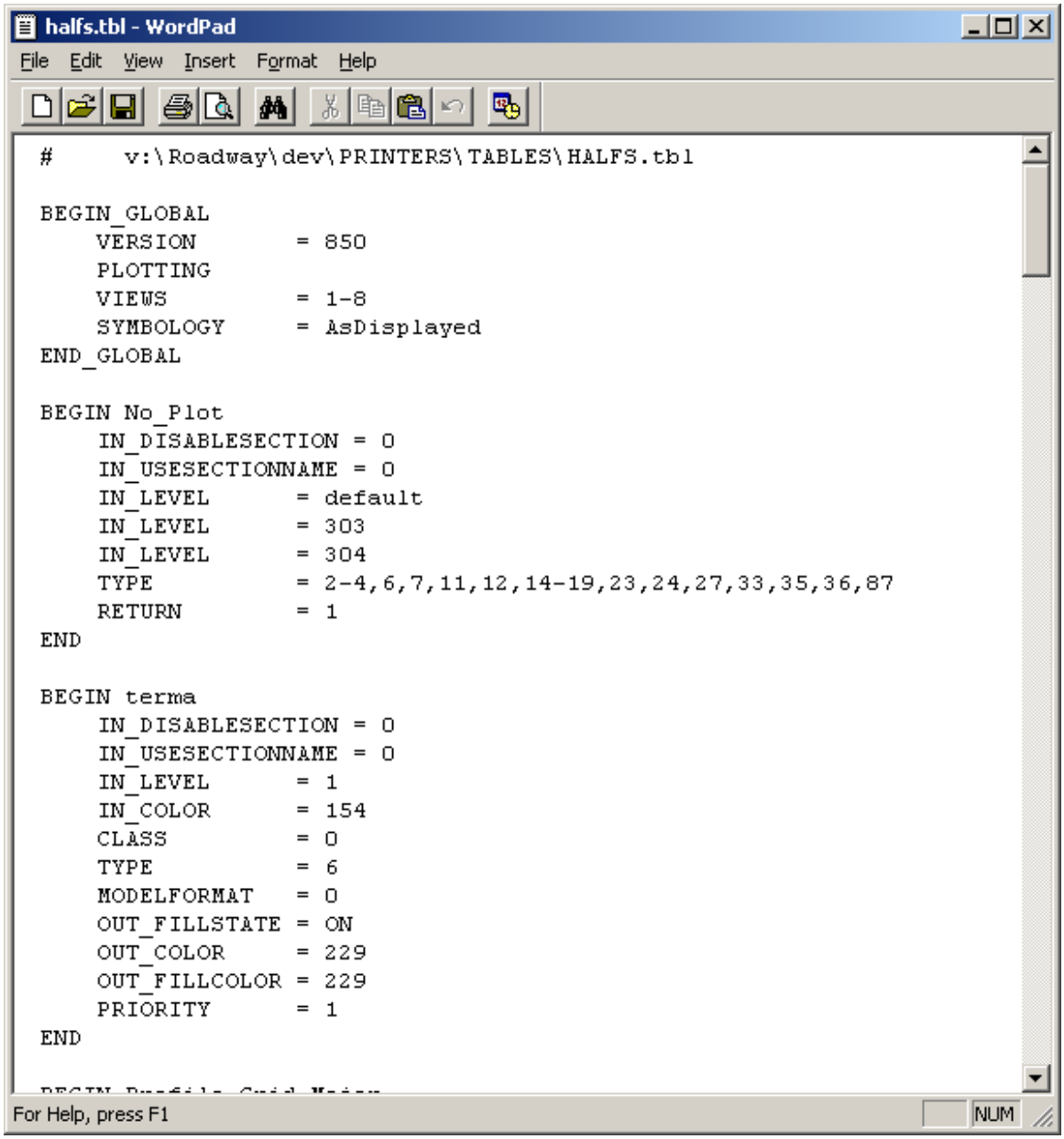
raster: raster file control



styles: line codes 1-7 definitions (the example is for halfsize)



Tables: the pentable used to achieve the desired resymbolization



While most of these files will work fine as they are, some will require modification by the consultant to fit their system.

Modifications for halfsize:

The halfsize greyscale "plt" files come delivered utilizing the system default printer while the color has the printer name in use at ADOT. The syntax is:

(greyscale)

```
sysprinter /form=11x17 /orientation=landscape
```

(color)

```
sysprinter  /name=\\e980ts03\ENG113/form=11x17 /orientation=landscape
/offset=(0.02178,0)
```

If your default printer does not print halfsize, it will be necessary to add the "name" of your halfsize printer to the greyscale syntax. The color driver "plt" files will require that you modify the name to match your color printer name.

The print size is controlled by the "form" name. You will have to modify this form name if, when selecting the halfsize driver from Microstation, "Letter size" comes up. This means it did not find the proper form as currently defined in the "plt" file.

The shade of grey is controlled by the following lines from a "pen" file.

```
pen(1)=(229)/rgb=(0, 0, 0)    ; black
pen(2)=(228)/rgb=(155, 155, 155)    ; grey
pen(3)=(227)/rgb=(180, 180, 180)    ; light grey
```

The "rgb" values control the darkness of the grey plotting color—the larger the number the lighter the grey. The maximum is 255. You may have to adjust these numbers as different printers print different shades of grey.

Modifications for Fullsize

The fullsize plotting files will require the same revisions as the halfsize files. Greyscale drivers include the name "Xerox" in their "plt" filename while color include the name "OCE".

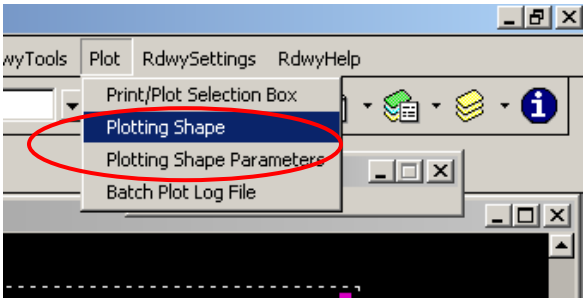
Diffences between halfsize and fullsize

Contours are plotted differently on halfsize than they are on fullsize. This is intentional. On halfsize plans both the index contours and the intermediate contours are greyscaled. On the fullsize plans, they are not greyscaled but rather resymbolized to line code 7 that has been modified in the "style" file for fullsize. The contours are dot patterned to create an illusion of greyscaling so that copies made of the final plans will not lose their "subduing" do to limitations of the copy machine.

It is permissible (but not recommended) to shift the plotting shape to the left to create binding space on halfsize plansheets but not on final fullsize plots.

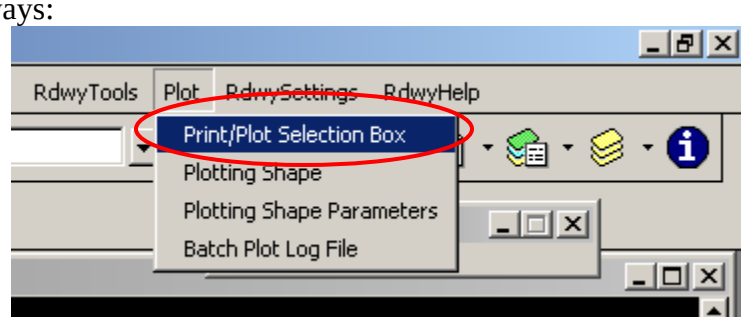
Printing Individual Files From Microstation

Both individual file plotting and plotting in a batch mode have been addressed. Both utilize a "plotting shape" to define the fenced area to plot. Select the "Plot/Plotting Shape" option on the Roadway menu.

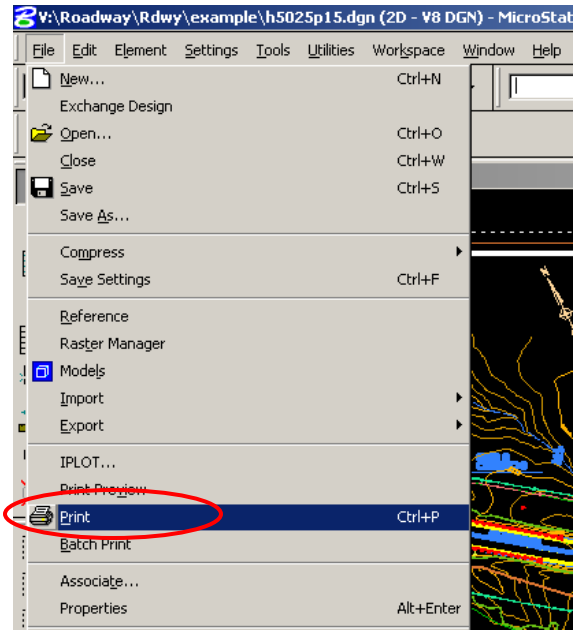


This activates placement of a cell named "shape2" which should overlay your plansheet cell in your border reference file. Plotting scale has been predetermined based on the size of the shape residing in this cell.

Plotting of a single file is accomplished via the "Print/Plot Selection" dialogbox. It can be activated two ways:



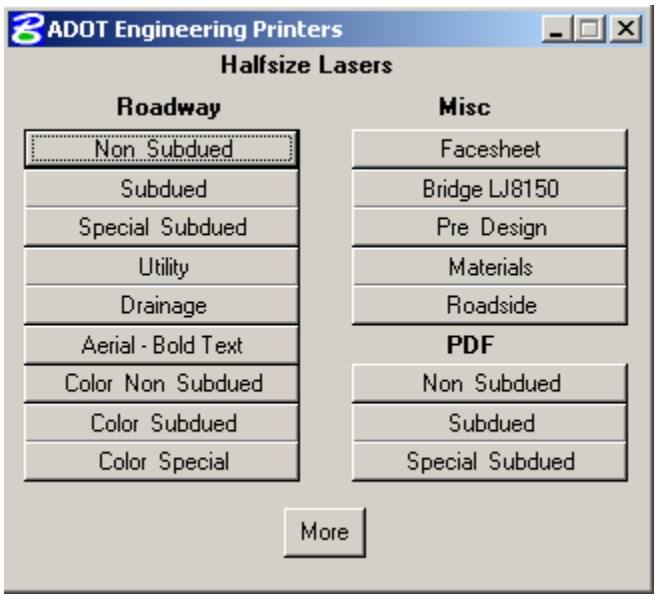
or



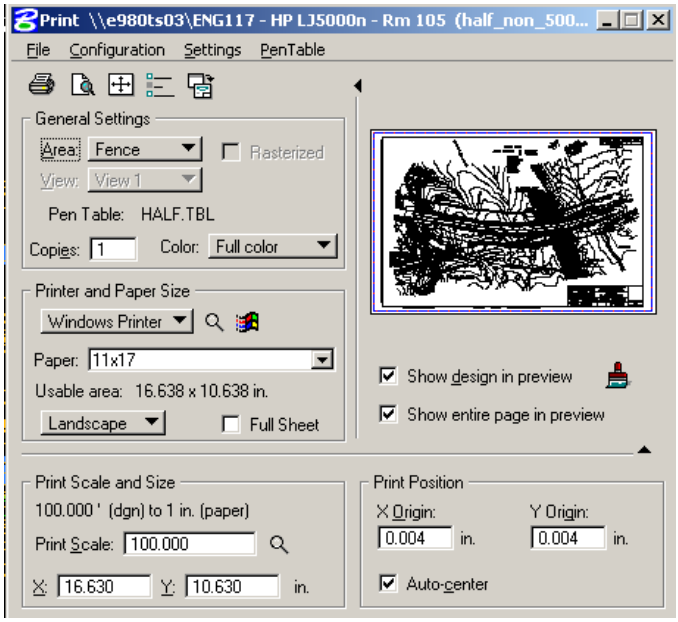
You may use the printer icon on the Microstation “Standard” toolbox to bypass the ADOT Print/Plot Selection box.

If file naming conventions have been held for Roadway plans, it is not necessary for the user to place the fence over the plotting shape. This has been automated provided no fence is present in the design file. If a fence is already present, the application will assume that this is the fence you require.

The Print/Plot Selection dialog box provides one button access to predetermined settings.



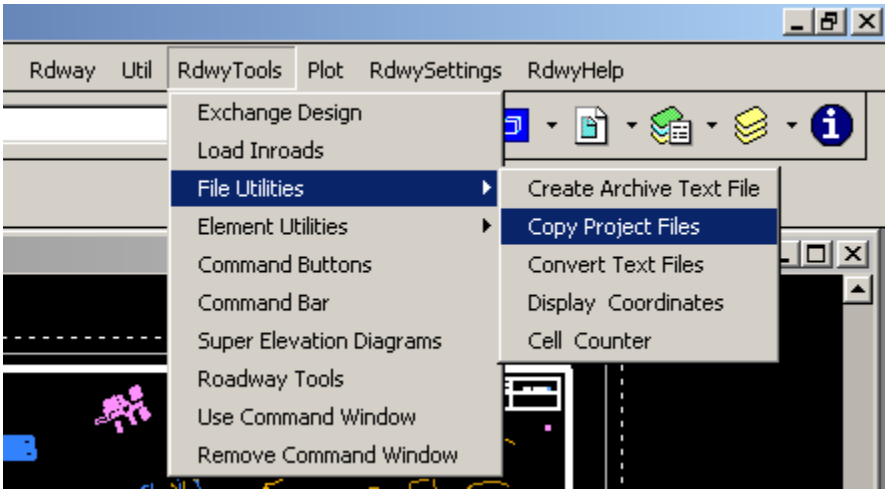
The user chooses the type of plot desired and the Microstation Print box will appear.

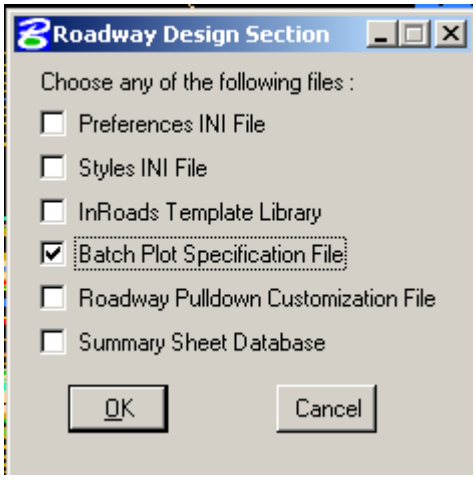


The user should be able to submit the plot at this point, everything should be correct.

Batch Plotting From Microstation

Batch plotting can be easily performed from the ADOT CADD Environment. The system has been configured on a folder basis. That is, the file that is open to start the batch plotting, the files to plot, the batch plot job file, and the batch plot specification file are to be located in the same folder. To copy the default specification file to the current directory, select "Rdwytools\File Utilities\Copy Project files". Then select the Batch Plot Specification and click on "OK". The standard specification file will be copied to the current directory in which the file you have open resides. If one exists already, it will be overwritten with the default file. No warning is supplied.





You may now batch plot your files. A separate batch plot "Help" file is available from within the Roadway Help system.